# Title 15 – Mississippi State Department of Health

Part IV - Office of Health Protection"

Subpart 15 – "Bureau of Public Water Supply"

# CHAPTER 01 REGULATION GOVERNING FLUORIDATION OF COMMUNITY WATER SUPPLIES

#### 100 GENERAL PROVISIONS

## 100.01 **Coverage.**

- 1. This regulation shall only apply to community water systems (CWS) serving a population of at least two thousand (2,000).
- 2. Each CWS shall be required to acquire and install fluoridation treatment equipment capable of maintaining fluoride levels within the optimal range as defined in this regulation, and shall comply with all requirements of this regulation for the purpose of protecting the dental health of the citizens of this State. No System shall be required to comply unless sufficient funds are identified by the Department, whether by appropriation, capital outlay, grants or similar means or source of funds, as available to that system for the cost of acquiring and installing fluoridation equipment, and the cost of material required to fluoridate said system for at least one year from the date of initial installation.

## 100.02 **Definitions.**

- 1. **Adjusted fluoridated water system** shall mean a public water system that adjusts the fluoride concentration in the drinking water to the optimal level for consumption (within the recommended control range).
- 2. Community Water System (CWS) shall mean any water system serving piped water for human consumption to fifteen (15) or more individual service connections used year-round by consumers or regularly serving twenty-five (25) or more individual consumers year-round, including, but not limited to, any collection, pretreatment, treatment, storage and/or distribution facilities or equipment used primarily as part of, or in connection with such system, regardless of whether or not such components are under the ownership or control of the operator of such system.
- 3. **Department** shall mean the Mississippi State Department of Health.
- 4. **Entry point** shall mean a location following one or more finished (fluoridated) water sampling points but prior to the beginning of the distribution system of the public water system.

- 5. **Natural fluoride content** shall mean the concentration of fluoride in milligrams per liter (mg/L) that is present in the water source from naturally occurring fluoride sources.
- 6. **Optimal fluoride level** in Mississippi shall mean the amount of fluoride in water that is found naturally or adjusted within a recommended control range of 0.7-1.3 parts per million fluoride (ppm) with the optimal fluoride level being 0.8 ppm.
- 7. **Parts per million** shall mean a unit of measurement that is equivalent to 1 milligram per liter (mg/L) where the density of the liquid measured is 1.0 gram per cubic centimeter (the density of water is 1.0).
- 8. **Public water system (CWS)** means a system for the provision to the public of water for human consumption through pipes or, after August 5, 1998, other constructed conveyances, if such system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least 60 days out of the year.
- 9. **Raw water** is defined as water that has not been treated or had fluoride injected into it by the CWS and that contains only naturally occurring levels of fluoride.

# 101 ADJUSTED FLUORIDATED WATER SYSTEM REQUIREMENTS

## 101.01 **Testing.**

A minimum of three (3) water samples shall be taken by designated CWS personnel on different days each week at all entry points and analyzed for fluoride content. At least once each month at each entry point, designated CWS personnel shall divide (split) one sample (hereinafter referred to as the split sample) and have one portion analyzed for fluoride by designated CWS personnel and the other portion analyzed by the Department's laboratory or a private lab certified by the Department for fluoride testing.

## 101.02 Verification.

Designated CWS personnel shall use water sample fluoride content results to compare with a calculated fluoride dosage to verify fluoridation program operation. The calculated dosage is defined as the calculated amount of fluoride that has been added to a water system. The calculation is based on the total amount of fluoride (weight) that was added to the water system and the total amount of water (volume) that was produced plus the naturally occurring fluoride at the source

#### 102 OPTIMAL FLUORIDATION REQUIREMENTS

## 102.01 Monitoring.

- 1. The monthly average fluoride content of all water samples requested in section 101.01 shall have fluoride content within the optimal fluoride control range defined in section 100.02.
- 2. The designated CWS personnel shall collect no less than 13 water samples per month from each entry point for analysis for fluoride and at least 90% of collected samples shall have fluoride content within the optimal fluoride control range defined in section 100.02.
- 3. The split sample result determined through analysis by designated CWS personnel shall agree with the result analyzed by the Department within a range of +/- 0.2 ppm in at least nine of 12 months during the calendar year.
- 4. Designated CWS personnel shall submit a report of the results of required water sample testing each month to the Department and shall include the type of fluoride chemical used.

# 102.02 Quality Assurance.

- 1. MSDH Bureau of Water Supply will assess each system's compliance with this policy on a monthly basis and send letters to the Responsible Official and Operator if the system is not compliant.
- 2. MSDH will prepare a compliance progress report on a monthly basis that will be made available to interested parties.
- 3. Each CWS that complies with the optimal fluoridation requirements during the calendar year to the satisfaction of the Department shall be recognized by the Department pursuant to its health promotion policies and guidelines.

#### 103 **COMPLIANCE**

### 103.01 Compliance.

- 1. CWS that fluoridate shall list in the Consumer Confidence Report the number of months in the previous calendar year that average sample results from a certified laboratory were within the optimal range.
- 2. Each CWS that fluoridates shall list in the Consumer Confidence Report the percentage of all samples collected in the previous calendar year that sample results were within the optimal range.

## 104 AUTHORITY TO REQUEST RAW WATER SAMPLE

## 104.01 Verification.

The Department shall have the authority to request samples of the CWS raw water source seasonally for fluoride content analysis at the Department's laboratory.